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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/734,811      | 12/11/2000  | Mark A. Peloquin     | AUS9-2000-0509-US1  | 2074             |

7590 12/17/2003

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EXAMINER

TRUONG, LECHI

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2126

DATE MAILED: 12/17/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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**Office Action Summary**

Application N .

09/734,811

Applicant(s)

PELOQUIN ET AL.

Examiner

LeChi Truong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on December 11, 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. Claims **1, 10, 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over M. Frans Kaashoek in view of Auslander et al (US. Patent 5,129,088).

**As to claim 1**, Kaashoek teaches device (physical disk, sec: 3/ 3.1/ Fig. 2), device information (information about each block, sec: 3/ 3.1/ Fig. 2), transforming (divides the disk into large, fixed size segment and update its block number map by storing new physical of the block, sec: 3/ 3.1/ Fig. 2), a logical disk (logical disk, sec 2.).

Kaashoek does not teach device volume management, a device driver for a device. However Auslander teaches the logical volume manage (col 9, ln 60-67 to col 10, ln 10-30/ col 13, ln 25-60), device driver (col 14, ln 50-67).

It would have been obvious to apply the teaching of Auslander to Kaashoek in order to provide an improved data processing method for installing files on a data processing system.

**As to apparatus of claim 10**, see the rejection of claim 1.

**As to a computer program product of claim 19**, see the rejection of claim 1.

2. Claims **2-9, 11-18, 20** are rejected under 35 U.S.C. 103(a) as being unpatentable over M. Frans Kaashoek in view of Auslander et al (US. Patent 5,129,088) and further in view of IBM (IBM to release LVM Technology to the Linux).

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**As to claim 2**, Kaashoek does not teach a device manage plug-in module. However, IBM teaches (AIX device manager/AIX feature plug-ins, page 3, 4).

It would have been obvious to apply the teaching of IBM to Kaashoek in order to allow us to co-exist with other operating system on the same machine, to share a disk with another operating system and to access the extents used by other operating systems.

**As to claim 3**, Kaashoek teaches the logical disk (sec 2.).

Kaashoek does not teach transforming the logical disk into a logical partition. However, Auslander teaches the first entry in logical partition map corresponding to the first logical partition contained within the logical volume (col 15, ln 52-68).

It would have been obvious to apply the teaching of Auslander to Kaashoek in order to provide an improved data processing method for installing files on a data processing system.

**As to claim 4**, Kaashoek does not teach a partition manage plug-in mode. However, IBM teaches AIX partition manager plug-ins (page 3,4).

It would have been obvious to apply the teaching of IBM to Kaashoek in order to allow us to co-exist with other operating system on the same machine, to share a disk with another operating system and to access the extents used by other operating systems.

**As to claim 5**, Kaashoek does not teach constructing a volume group. However, Auslander teaches create ... volume group (col 13, ln 25-67)/ col 10, ln 44-55/col 11, ln 20-26/col 12, ln 35-68/ col 18, ln 15-20).

It would have been obvious to apply the teaching of Auslauder to Kaashoek in order to provide ability to create, modify and query logical volumes, physical volumes and volume groups.

**As to claim 6**, Kaashoek does not teach a volume group emulator plug-in module. However, Auslauder teaches a Volume Group Map Entry (col 12, ln 135-67)/ the logical volume manager (col 10, ln 1-23).

It would have been obvious to apply the teaching of Auslauder to Kaashoek in order to provide ability to create, modify and query logical volumes, physical volume and volume groups.

**As to claim 7**, Kaashoek does not teach creating a logical volume from the logical However, Auslauder teaches creating a logical volume (col 18, ln 64-69 to col 19, ln 1-10).

It would have been obvious to apply the teaching of Auslauder to Kaashoek in order to provide ability to create, modify and query logical volumes, physical volumes and volume groups.

**As to claim 8**, Kaashoek does not teach a feature plug-in module. However, IBM teaches the AIX feature plug-in (page 3,4).

Would have been obvious to apply the teaching of IBM to Kaashoek in order to allow us to co-exist with other operating system on the same machine, to share a disk with another operating system and to access the extents used by other operating systems.

**As to claim 9**, Kaashoek does not explicit teach, "exporting the logical volume". However, IBM teaches accessing and using AIX logical volume (page 4).

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It would have been obvious to apply the teaching of IBM to Kaashoek in order to manage the LBs corresponding to the volume underlying the filesystem.

**As to apparatus of claim 11, see the rejection of claim 2.**

**As to apparatus of claim 12, see the rejection of claim 3.**

**As to apparatus of claim 13, see the rejection of claim 4.**

**As to apparatus of claim 14, see the rejection of claim 5.**

**As to apparatus of claim 15, see the rejection of claim 6.**

**As to apparatus of claim 16, see the rejection of claim 7.**

**As to apparatus of claim 17, see the rejection of claim 8.**

**As to apparatus of claim 18, see the rejection of claim 9.**

**As to a computer program product of claim 20, see the rejection of claim 2.**

**2. Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5 PM.

Fax phone: AFTER\_FINAL faxes must be signed and sent to: (703) 746-2738, OFFICAL faxes must be signed and send to: (703) 746-7239, NON OFFICIAL faxes should not be signed, please send to: (703) 746-7240

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 305 9000.

LeChi Truong

December 5, 2003

A handwritten signature in black ink, appearing to be 'JF', written over a faint, larger signature.

**JOHN FOLLANSBEE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100**